

## Ward Summer Research Student (SOAR position) – Summer 2026

**Program:** Sparking student Opportunities for Advancing inclusive childhood disability Research program

**Institution:** Holland Bloorview Kids Rehabilitation Hospital – Bloorview Research Institute

**Principal Investigator:** Dr. Jacob Ellegood

**Lab:** Ellegood Lab

**Graduate Department Affiliation:** Medical Biophysics

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### Project Title

Assessing White Matter Differences in Neuroanatomical Subgroups in Neurodevelopmental Disorders

### Project Overview

Neurodevelopmental disorders (NDDs) affect millions of children worldwide and are still primarily diagnosed based on behavior. However, children who present similarly can have profoundly different underlying neurobiology. Recent research from our lab shows that children cluster into meaningful neuroanatomical subgroups based on patterns of brain organization rather than diagnosis alone.

This project will build on that work by investigating microstructural white matter differences using Diffusion Tensor Imaging (DTI). This analysis will help identify underlying neurodevelopmental mechanisms and contribute to more precise, mechanism based subgrouping of NDDs.

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### Position Details

- **Start Date:** May 4, 2026
- **End Date:** July 24, 2026
- **Type:** Hourly
- **Wage:** \$17.60/hour
- **Position Type:** Hybrid
- **Number of Positions:** 1

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## **Responsibilities**

- Conduct neuroimaging analyses, including diffusion imaging processing
- Perform computer-based data analysis (R and other Tools)
- Contribute to scientific writing and documentation
- Collaborate with research team members and participate in lab activities

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## **Qualifications**

- Enrolled in an Undergraduate Neuroscience or Physics program
- Decent programming skills (any language; R experience is an asset)
- Strong analytical and problem solving abilities
- Interest in neuroimaging, neurodevelopment, or brain based research

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## **Application Requirements**

- Cover letter
- CV
- Transcript
- Letter of Recommendation